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ABSTRACT

Bem's Psychological Androgyny Theory (PAT) posits two independent domains of behavior on which individuals may be rated. Instrumental (Type I) behavior reflects a problem-solving orientation; expressive (Type E) behavior reflects an affective concern for the welfare of others. To examine the hypothesis that these two dimensions theoretically resembled those studied by leadership and conflict resolution literatures, male undergraduates (N=47) completed 3 inventories: (1) the Bem Sex-Role Inventory (BSRI) from which Type-I and Type-E scores were computed; (2) the Fleishman Leadership Opinion Questionnaire (FLOQ) from which "structure" (Type-I) and "consideration" (Type-E) scores were computed; and (3) the Thomas-Kilman Conflict Mode Instrument (MODE) from which "assertiveness" (Type-I) and "cooperation" (Type-E) scores were computed. A factor analysis of scores generally supported the view that the BSRI, the FLOQ, and the MODE, representing PAT, leadership, and conflict resolution literatures respectively, provided similar measures. The findings suggest that androgyny as a multidisciplinary construct is known by many names. (Author/NRB)

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Androgyny is Known by Many Names

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Running Head: Multidisciplinary Androgyny

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Androgyny is Known by Many Names

Initiated by Bem (1974), Psychological Androgyny Theory (PAT) has generated a considerable and rapidly expanding literature. Today behavioral scientists study social, cognitive, developmental, applied (e.g., clinical, community, and organizational), and psychometric aspects and implications of PAT, and do so from within various "academic communities" including psychology, sociology, and management science. Despite (perhaps because of) this diversity of research, a comprehensive review has not yet been published. In the early stages of a review I found and report here evidence that the area is far more extensively researched than is currently believed.

Central to PAT is the assumption that there exist two independent domains of behavior: masculine or instrumental (Type-I or I behavior), and feminine or expressive (Type-E or E behavior). Type-I behavior is seen as reflecting a cognitive emphasis on "getting the job done", while Type-E behavior is seen as reflecting an awareness of and concern for the affective needs of others (Bem, 1974; Spence, Helmreich, & Stapp, 1975).

The Bem Sex-Role Inventory (BSRI; Bem, 1974) is one widely used "androgyny instrument" providing I and E scores. PAT theorists utilize these scores in predicting inter- and intra-individual differences on various instrumental and expressive tasks (Yarnold, Note 1). It is proposed below that two other well known areas of psychological inquiry have utilized theoretically and empirically similar measures, despite the fact that there has been relative isolation (i.e., little if any and only indirect cross-referencing) between them. They include:

PAT in Leadership Theory. The Ohio State and Michigan studies of leadership (Simmons, 1978) isolated two reliable independent "attitude

factors" considered relevant to worker productivity. The Ohio State factors were "initiating structure" and "consideration": the former is related to a leader's concern for the task or "getting the job done", whereas the latter is related to the "psychological closeness" between leader and subordinate (Hamner & Organ, 1978). The Michigan studies found theoretically similar factors named "production-centered" and "employee-centered" respectively.

PAT in Conflict Resolution. Extending the work of Blake, Shepard, and Mouton (1964), Kilmann and Thomas (1975) named two independent dimensions relevant to their theory of conflict resolution (bargaining) "assertiveness" (attempting to satisfy one's own concerns) and "cooperation" (attempting to satisy the other's concerns). Ruble and Thomas (1976) state that assertiveness "seems to involve the dynamic pursuit of one's own needs" (p. 144), whereas cooperation "appears to involve concern for the welfare of others" (p. 144).

The disciplines described above have each developed an inventory from which scores on two dimensions may be obtained for any subject. It is hypothesized that all of the foregoing are PAT instruments, in that a factor analysis of the various scores would reveal a two dimensional simple structure (Kleinbaum & Kupper, 1978): specifically a Type-I factor and a Type-E factor.

Method

Subjects

The subjects were 47 males participating in exchange for introductory psychology credit. Their ages varied from 17 to 27 (M=20), and the ordinally ranked ethnic categories represented in the sample included American and foreign whites, blacks, Hispanics, orientals, and one person from India.

Design, Procedure, and Inventories

The design consisted of presenting a total of three inventories to each subject. To control for order effects, the inventories were ordered and stapled following a Latin Square design (Hicks, 1973).

The subjects were tested in groups ranging in size from 3 to 19. Once all subjects arrived, instructions for completing the inventories were given, questions answered, and inventories distributed. Upon handing the investigator a completed set of inventories, the subject was thanked and handed a debriefing letter, thus marking the end of the session. The inventories included:

a. Bem Sex-Role Inventory (BSRI). As discussed above Bem (1974) developed an inventory from which I and E scores, each based on 20 items, may be computed.

b. Fleishman Leadership Opinion Questionnaire (FLOQ). The FLOQ (Pfeiffer, Heslin, & Jones, 1976) consists of 40 items from which two scores, each based on 20 items, may be computed. These include "structure" (Type-I) and "consideration" (Type-E); the Ohio State factors.

c. Thomas-Kilman Conlict Mode Instrument (MODE; Thomas & Kilmann, 1974). The MODE consists of 30 items from which two scores may be computed (Kilmann & Thomas, 1975). They include "assertiveness" (Type-I) and "cooperation" (Type-E).

Results

Six scores (Type-I and Type-E from the BSRI, FLOQ, and the MODE) were computed for every subject, and the resulting (6X6) correlation matrix (with squared multiple correlations as estimates of the communality in the major diagonal) decomposed using an iterated principal components factor analysis (Kleinbaum & Kupper, 1978). The solution was rotated to simple

structure using a varimax rotation. A scree test (as well as Kaiser's stopping rule) revealed a two factor solution accounting for 56 percent of the variance. The rotated factor pattern is shown in Table 1.

Insert Table 1 About Here

Examination of the factor weighting coefficients reveals that the first factor is composed 69% by the three hypothesized I scales, although the BSRI-E scale contributes 20% of the remaining variance. The second factor is composed 88% by the three hypothesized E scales, although the BSRI-E scale contributes only 1% of that variance. Thus it is tentatively concluded that an I-type and an E-type factor emerged, although perfect simple structure was not obtained.

The simple structure hypothesis states that all I scales should load on and only on the I factor, and that all E scales should load on and only on the E factor: a set of 12 expectations. Both expectations regarding the BSRI-E scale were violated; however, the resulting success proportion (.833) is significantly greater than expected given chance alone ($p<.02$) by a binomial test (Hays, 1973).

Discussion

Although the hypothesis that the three inventories provide similar measures was statistically confirmed, those hypotheses concerning the BSRI-E scale surprizingly were not. However, considering the large ethnic, lingual, and other demographic heterogeneity of the sample; in combination with the lack of research examining the psychometric properties of the scales in multi-demographic contexts; an 83 percent confirmation appears optimistic.

The results generally support the hypothesis that (for male college students) the BSRI, the FLOQ, and the MODE, representing PAT, leadership, and conflict resolution literatures respectively, provided similar measures. Theories in one area, as well as empirical results, may therefore be relevant in both of the other areas. One consequence is that PAT literature, favoring the instrumental domain of experimental tasks, is complemented by leadership literature which has favored the expressive domain. The multidisciplinary range of PAT however, is not limited to leadership and conflict resolution literatures. The most astounding reference I (Yarnold, Note 2) have located is for a multidisciplinary book edited by Hare, Borgatta, and Bales (1955). Authors, discussing prototypic PAT questions, include Allport, Berkowitz, Borgatta, Cattel, Durkheim, Festinger, Fred E. Fiedler, Kurt Lewin, Lippitt, George H. Mead, Newcomb, Herbert A. Simon, Slater, and on and on. Talcott Parsons, Jung, Freud, Wiggins, and Leary have discussed related issues. Most recently I discovered evidence of PAT-like dichotomizations in the theory of American Law. With no immediate end in sight, I have located what I estimate is between one and two thousand published and unpublished relevant units of literature. Even if it is not true that the whole is more than the sum of its parts, the collective works of these and other authors may represent a collosal increment in the state of development of PAT. Indeed, one might conclude that androgyny is known by many, many names.

Footnotes

A preliminary version of this paper was presented at the Annual Meeting of the American Psychological Association, Los Angelos, August, 1981.

Requests for reprints should be sent to the author at the address given at the end of the article.

Reference Notes

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Table 1.

Varimax Rotated Factor Pattern for K=2 Factors and N=47

Variable	Factor Weighting Coefficient Factor 1	Factor 2
BSRI-I*	.83	-.05
FLOQ-I	.65	.38
MODE-I	.50	-.11
BSRI-E	.63	.10
FLOQ-E	.35	.79
MODE-E	-.31	.76
Eigenvalue	1.99	1.38
Percent Variance	33%	23%

* The first four letters identify the inventory and the last letter identifies the scale.

Note: Factor members weight at $\geq$.50 on factors